

# **ABSTRACT**

An optical signal to electrical signal converter of the present invention comprises an optical waveguide propagating a modulated optical signal therethrough; a pair of electrodes  
5 disposed at positions opposite to each other sandwiching the optical waveguide within a region where an electric field reaches that is generated in the optical waveguide when the optical signal propagates through the optical waveguide; and a resonator coupled to the pair of electrodes, the resonator receiving for  
10 excitation an electrical signal induced at the pair of electrodes by the electric field.